

Commissioners,

My name is Tim Gorman and I am an amateur Extra class licensee, callsign AB0WR.

This petition states in the Executive Summary that Morse telegraphy is essentially a recreational activity and is obsolete. Contrary to this statement, Morse telegraphy using the CW mode of transmission is still the primary communication method in several modern, weak signal methods of communication. This is not just a recreational method of communication. It is a vital part of the Amateur Radio Service continuing to advance the communication phase of the art and is thoroughly modern in this regard. The supposedly newer digital modes of transmission are still not as useful as Morse code using the CW mode of transmission in this type of communication because of the need for digital signals to synchronize before demodulation can begin. Techniques using meteor scatter and such provide too much phase shifting and too intermittent of a path for the digital modes to reach their full potential.

While Morse code may not be the most modern and most useful communication technique for daily conversing between friends concerning the weather and other such topics, it is certainly not obsolete and is still a vital, useful, and useful communications technique for advancing the communication phase of the art as laid out in Title 47, Part 97, Section 97.1(c).

Paragraph 14 of the petition claims that modern digital modes, readily available to amateurs can deliver perfect copy under such poor signal to noise conditions that even the most skilled Morse operator would be unable to detect the presence of a Morse signal.

This is a significant overstatement of the advantages of the digital modes. Current experience shows these modes to have about a 3db signal to noise advantage at best. This is in the presence of random noise such as static and atmospheric noise. It is most definitely not true in the case of poor propagation conditions such as multipath propagation, selective fading, doppler shifting, and white noise where phase synchronization of the signals cannot be reliably maintained. The ARRL Handbook for Radio Amateurs notes - "Our brain's ability to filter out extraneous noise and signals is remarkable. The dynamic range and sensitivity of our vision and hearing are close to the theoretical limits". Communicating using Morse code and CW allows communicating in the presence of severe multipath propagation, selective fading, doppler shifting, and white noise. That is why it is a primary tool in investigating communication over non-optimum propagation paths.

The petition states in Paragraph 18 that "the maintenance of outdated Morse requirements has been the single biggest impediment to the recruiting of otherwise qualified "new blood""

What the petitioner fails to discuss is the impediment caused by the technical test to those such as minorities and second language citizens who have a difficult time learning the technical phase of the art because of low reading skills, let alone a difficult time taking the test. While there is no empirical data to prove this, the

popularity of rhythm based music such as rap and hip-hop among many of our youth, even disadvantaged youth, should show that rhythm based codes such as Morse should not be an impediment to most of our youth to learn - at least not nearly the impediment the technical tests are to that population such as inner-city youth who graduate high school with a third-grade reading level. It is this area of the amateur service which should be concentrated on if we want to increase the diversity of the membership in the Amateur Radio Service and truly bring in "new blood".

Neither does this petitioner address what the Commission should substitute in place of the admittedly low-difficulty 5 wpm Morse code test to satisfy the Title 47, Part 97, Section 97.1(c) requirement for the Commission to provide encouragement and improvement of the amateur service through rules which provide for advancing skills in the communication phase of the art. The current Morse code test is the only positive testing that the Commission currently requires. It is also the simplest to learn and the easiest to test for.

In analyzing this the Commission needs to be sure to distinguish between technical knowledge and communication skill. Knowledge of the makeup of a packet header is technical knowledge. How to choose the best path among a number of digipeaters to accomplish a connection to a packet bulletin board at a specific time of day and with varying weather conditions is a test of communication skill. Knowing the accepted bandwidth for a SSB signal is technical knowledge. The ability to pick out a callsign on SSB during severe static using a receiver's various abilities such as bandwidth filters, notch filters, filter slope adjustments, passband tuning adjustments, and such is a test of communication skill. Copying 5 wpm Morse code is a communication skill.

The Morse code test can easily be set up for almost anyone with a physical disability. Signalling such as light bulbs or vibrating units can be used for those who have a hearing or vision problem. Testing for other communication skills would not only be more difficult, it would actually result in a bigger impediment to a larger number of people. Morse code can be learned from a \$10 CD on a player that most people have today. Learning voice or digital communication would probably require a big investment in equipment for listening to the various modes before a test could even be taken.

For the reasons given above, I respectfully request the Commission to decline the petitions request to eliminate Morse code testing at the 5 wpm level for at least the General and Extra class license levels.

Respectfully yours,

Tim Gorman AB0WR